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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,378	12/30/2003	Fabio Massimo Chiussi	24-12	4391
7590	11/30/2004			
Wendy W. Koba P.O. Box 556 Springtown, PA 18081			EXAMINER JAGANNATHAN, MELANIE	
			ART UNIT 2666	PAPER NUMBER

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/748,378

Applicant(s)

CHIUSSI ET AL.

Examiner

Melanie Jagannathan

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 32-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 32-33, 37, 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Calvignac et al. US 6,144,637.

Regarding claims 32-33, 37, 39, the claimed determining whether session rate matches one of a plurality of basic rates, which each basic rate associated with a respective one of a plurality of rate-specific queues and splitting the session, in response to a non-match of session rate with any of the basic rates, into subsessions for queuing into at least one of the rate-specific queues and if queuing the session in an unsplit state in response to match is disclosed by incoming packets placed into one or more packet queues having a plurality of transfer rates. A connection requiring a packet transfer rate that matches the rates possible by timing circuit operating at different frequencies for queues is sent through, for example in Figure 4A connection 1 needing rate of  $F/2$  is sent through line with that rate but connection 2 needing  $3F/32$  rate is sent over lines with frequencies adding up  $F/4 + F/32$ . See column 3 and column 4, lines 59-67, column 5, lines 1-13.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calvignac et al. Calvignac et al. discloses all of the limitations of the claims except step of splitting includes the step of splitting the session into subsessions wherein every subsession has an identical subsession rate. Calvingnac discloses generating packet transfer signals at frequencies F/2, F/4, F/8, F/16, F/32 and scheduling of three different combinations with outputs at rates at one of the frequencies or in combination of these frequencies. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify timing circuits of Calvingnac to be able to produce connections at identical frequencies. One of ordinary skill in the art would be motivated to do so for efficient routing.

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5. Claims 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calvignac et al. in view of Fan et al. US 6,408,005.

Regarding claim 38, Calvignac discloses all of the limitations except for the claimed per-connection timestamp. Fan et al. discloses scheduling for rate shaping utilizing timestamps associated with each queue. See column 15, lines 57-67, column 6, lines 1-4. At the time the invention was made it would have been obvious to modify traffic shaping of Calvignac with timestamps of Fan et al. One of ordinary skill in the art would be motivated to do so for efficient scheduling of packets.

Regarding claim 40, Calvingnac discloses all of the limitations except for FIFO queues. Fan et al. discloses FIFO scheduler. See column 1, lines 28-41. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify queues of Calvignac to be FIFO queues. One of ordinary skill in the art would be motivated to do this because first in first out efficiency in handling packets in queue.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chow et al. US 6,438,134 disclose bandwidth scheduler in multi-class digital communication system.


Morris et al. US 6,477,144 disclose time linked scheduling of cell-based traffic.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 571-272-3163. The examiner can normally be reached Monday-Friday 8:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3163.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**FRANK DUONG**  
**PRIMARY EXAMINER**

Melanie Jagannathan  
Patent Examiner  
AU 2666

MJ